

# Sky and TELESCOPE

## INDEX TO VOLUME I

This index to Volume I of "Sky and Telescope" has been arranged to be as useful as possible as a reference guide to the issues. Title, author, and subject references will be found. Authors' names are in italics, and major articles are distinguished from subject references by initial capital letters and the inclusion of the author's name in the reference.

In each case the first number given refers to the issue in Volume I; the second number, to the page.

All books which have been reviewed are listed only under the heading, Books and the Sky.

References followed by (ill.) indicate that the material is chiefly or entirely photographic. Other illustrative material needed may be found by referring to major articles on the subject.

Where a major article appears under a subject head, no attempt has been made to index the smaller parts of the subject covered by the article. Many such articles will be found to contain complete discussions.

### A

A.A.V.S.O.—30th Annual Meeting, *Percy W. Witherell*, 1,10  
to meet, 12,17  
Abbot, Charles G., 7,7  
Adams, Walter S., 6,11  
Adel, Arthur, 9,4  
*Aitken, Robert G.*, Sirius and Its Companion, 11,3  
Algol—5,4  
minima of, 1,24; 2,25; 3,25; 4,24; 5,24; 12,20  
Predictions of Minima, *Zdenek Kopal*, 4,2  
Story of Algol, The, *Zdenek Kopal*, 4,8  
Allegheny Observatory, new acting director, 1,26  
Aller, Lawrence H., 5,16  
*Aller, Lawrence H.*, "Ages of Observation," 10,11  
*Alsing, Carl F.*, Twenty-Inch Operations, 1,19  
Amateur astronomers—and the war, 3,2  
Amateur's New Observatory, An (Roelof Weertman), *Louis E. Bier*, 11,15  
Chicago (Great Lakes) Regional Astronomical Convention, 8,19; 9,14  
Fourth National Convention, 6,19; 7,18; 8,19  
Here and There with Amateurs, all issues but 10 and 12  
Midwestern Amateur's Observatory (Carl H. Gamble), *Jack Sundine*, 3,18  
Pittsburgh Amateur (Leo Scanlon), *Fred Garland*, 4,18  
Stargazer's Workshop, A (Herbert M. Harris), *Adeline Dunton*, 2,18  
Stellafane cancelled, 6,19  
Amateur Astronomers League of America, 1,20; 2,19; 3,18; 4,19; 5,18; 6,19  
Amateur societies—Boston, Bond, 4,19  
Daytona Beach, 3,19  
Detroit, Astronomical Society, 2,19; 5,18; 9,14; Northwest, 2,19  
Duluth, 3,19; 6,19  
Moline, 3,18  
New Haven, 4,19  
New York, A.A.A., 1,26; 2,19; 3,18; 3,19; 4,18; 5,18; 6,19; 7,18; 8,19; 9,14; 11,15; 12,8  
New York, J.A.C., 1,26  
Oakland, 4,19  
Pittsburgh, 3,18; 4,18; 9,14; 11,15  
Pontiac, 5,18  
Stamford, 4,19

### Amateur Societies—continued

Washington, D.C., 3,19; 4,19  
Yakima, 8,19  
American Astronomical Society—announcement, 7,10; 8,11  
committee on pronunciations, 11,6  
67th meeting (Cleveland), 4,14; papers from, 4,7; 5,16  
68th meeting (New Haven), 9,3; papers from, 9,12; 10,9  
Analemma, The, *Erwin Raisz*, 7,11  
Andromeda, 12,22  
Asclepius, 10,22  
Asteroids, 9,19  
Astrology—1,2; 1,20; 2,2; 3,2  
Buhl Conducts Survey on Astrology, 1,12  
How to Meet the Fifth Column in Astronomy, *W. Carl Rufus*, 3,9  
Nostradamus, 5,2  
statistical tests, 4,12  
Summary of a Lecture, *Bart J. Bok*, 4,12  
Astronomers—handicapped, 1,6  
needed at Naval Observatory, 4,16  
Astronomical Anecdotes, *R.K.M.*  
Another Case—Another Photograph, 11,10  
"Budget of Paradoxes, A," 8,21  
Diameters; Uranus Versus Neptune; *Hi-Ho*, 9,17  
Early Telescope Makers and a Headlamp Lens, 5,21  
Frederic's Birthday, Parallax Problems, and Pulkovo Observatory, 3,19  
Michigan Photograph, A, and "H.D."—  
"A Hammer and Chisel Man," 4,13  
More Pi, A Rogue, and a King, 12,15  
"Most Cometary Year, The," and Handicapped Astronomers, 1,6  
Reversed Schmidt, A, Patent 969,785; and Zeppelins, 6,21  
"Scurrilous Poster," A, 2,13  
Squaring the Circle; Stars by Day, 10,5  
Stars Visible by Day? Just Grazing;  
"What Science Says to Truth," 7,23  
Astronomical poems—Friends of Mine, 1,9  
Planetary, The, 3,16  
Astronomical Work of Galileo Galilei, The, 1. *Bernard Cohen*, 3,3  
Astronomy—abroad, 2,6  
. . . And The War, 5,9; 6,17; 8,11  
and war, 3,2; 9,2  
Anniversaries, 3,5  
Astronomy via Hurricane, *Pvt. Eugene E. Carl*, 2,6

### Astronomy—continued

Despite the War, 8,11  
highlights of, 1941, 1,11  
spellings and pronunciations, 11,6  
Aurora—and magnetic storms, 8,15  
Auroral Burst Supreme (September 18-19, 1941), (ill.), 1,1; 1,14  
Description of Auroral Forms, *C. W. Gartlein*, 1,16  
frequency, 8,16  
Autumn Skies, *William H. Barton, Jr.*, 11,12

B

Babylonian astronomy, 6,9  
Back-cover photographs, see Photographs  
*Bacon, W.*, letter from, 7,13  
Bailey, Dana K., 5,15  
Baker, James G., 10,16  
*Baker, James G.*, book reviews, 2,20  
Objective-Grating Plates, 8,22  
*Baldwin, Ralph B.*, The Story of Gamma Cassiopeiae, 9,5  
Balmer lines, 4,6  
Barkus, L.F., 10,17  
*Barton, William H., Jr.*, Autumn Skies, 11,12  
Christmas Story, 2,9  
Facts About Eclipses, 10,3  
Facts About the Sun, 9,9  
Mysterious Mars, 1,8  
Planets, and Their Relation to History, The, 8,3  
Sailing the Seven Seas, 12,6  
Spring, 5,11  
Waves from Space, 4,5  
Weather Signs in the Sky, 7,7  
*Bates, Ralph S.*, book review, 6,22; 11,19  
Henry Fitz—Early American Telescop-Maker, 1,18  
Second Astronomer Royal—Edmond Halley, 5,7  
Beals, C.S., 5,16  
Beginner's Page, all issues, *George V. Plachy*, 1 and 2; *Percy W. Witherell*, 3 ff; see under authors for titles  
Bessel, F.W., 3,6; 11,4  
*Beta Lyrae*, The Story of, *Gerard P. Kuiper*, 5,4  
Bethe theory of stellar evolution, 6,11  
Bidelman, W., 5,16  
*Bier, Louis E.*, An Amateur's New Observatory, 11,15

Birkhoff, George D., 6,13  
 Blennerhassett, Harman, 12,15  
 Bode's law, 8,4  
 Bok, Bart J., 6,12; 10,9  
 Bok, Bart J., Mexico's New National Observatory, 2,3  
 Summary of a Lecture, 4,12  
 Books and the Sky  
 Amateur Telescope Making—4th ed. *James G. Baker*, 2,20  
 Astronomy, Maps, and Weather, C. C. Wylie, *Fletcher G. Watson*, 12,16  
 Biography of the Earth, George Gamow, *Fletcher G. Watson*, 1,22  
 Comet Strikes the Earth, A. H. H. Nininger, *Percy W. Witherell*, 11,19  
 Days of Creation, The, Willy Ley, *R. Newton Mayall*, 6,23  
 Doctor Wood, William Seabrook, *Donald H. Menzel*, 5,22  
 Earth, Moon and Planets, Fred L. Whipple, *Roy K. Marshall*, 1,22  
 Enjoyment of Science, Jonathan Norton Leonard, *Harlan T. Stetson*, 9,18  
 Essentials of Astronomy, John Charles Duncan, *R. William Shaw*, 10,19  
 Glass—the Miracle Maker, C. J. Phillips, *James G. Baker*, 2,20  
 Introduction to Meteorology, Sverre Pettersen, *Ralph W. Burhoe*, 5,22  
 Jean Domenique Cassini and his World Map, Lloyd A. Brown, *Ralph S. Bates*, 6,22  
 Living Biographies of Great Scientists, Thomas and Thomas, *Donald H. Menzel*, 4,20  
 Manual of Astronomy, Shaw and Boothroyd, *Charles H. Smiley*, 6,22  
 Matter, Energy, and Radiation, Dunning and Paxton, *Robert I. Wolff*, 11,19  
 Meteorological Glossary, The, *Ralph W. Burhoe*, 5,23  
 Meteorology, Donald S. Piston, *Ralph W. Burhoe*, 5,23  
 Morning Star Rises, The, Maud Worcester Makemson, *Gerald Wendt*, 3,20  
 New Worlds in Science, ed. Harold Ward, *James Stokley*, 4,21  
 Observer's Book on Astro-Navigation, The, Francis Chichester, *Urania Dayton Fuller*, 7,21  
 Physical Science, Ehret, Spock, Schneider, van der Merwe, and Wahlert, *C.A.F.*, 12,16  
 Star Maps for Beginners, Levitt and Marshall, *George V. Plachy*, 9,18  
 Stars in Myth and Fact, The, Oral E. Scott, *Armand N. Spitz*, 7,21  
 Story of Variable Stars, The, Campbell and Jacchia, *Roy K. Marshall*, 1,22  
 Time and Timekeepers, Willis I. Milham, *R. Newton Mayall*, 3,20  
 Weather and the Ocean of Air, William Holmes Wenstrom, *Edgar W. Woolard*, 8,20  
 Weather Elements, Thomas A. Blair, *Ralph S. Bates*, 11,19  
 Yankee Stargazer, Robert Elton Berry, *Capt. J. F. Hellweg*, 4,20  
 Bosque Alegre station, see Cordoba  
 Bowditch, Nathaniel, 12,7  
 Brooks, Charles F., Clouds, 6,14  
 Brown, Earle B., A.T.M. and the War, The, 6,20  
 Designing an Achromatic Objective, 10,18; 12,18  
 Further Note on Diagonals, 7,22  
 Gaviola or "Caustic" Test, 3,22; 4,22; 5,20  
 Make Your Own Spectroscope, 11,18

*Brown, Earle B.—continued*  
 Paradoxical Parabolas, 2,22  
 Refractor Versus Reflector, 9,16  
 Report on a Schupmann, 6,20  
 Bruno, Filippo Giordano, 6,8  
 Brunton, Foster D., "Sun-Gazers on Tutujan Hill," 2,5  
 "Budget of Paradoxes, A," book by de Morgan, 8,21  
 Buhl Planetarium—8,8  
 Buhl Conducts Survey on Astrology, 1,12  
 Dedicates New Telescope, 2,6  
 Planetarium Notes, all issues  
 Burhoe, Ralph W., book reviews, 5,22

## C

Calabash, Sacred, 12,6  
 Calendar—The Era of Nabonassar, *Edgar W. Woolard*, 6,9  
 Campbell, Leon, 9,13  
 Carl, Pvt. Eugene E., Astronomy Via Hurricane, 2,6  
 Carragan, G. Howard, The Student Observatory at Rensselaer Polytechnic Institute, 12,12  
 Cassiopeia, 12,22  
 Catalogues—Bruce proper motion survey, 5,10  
 Cape catalogue of proper motions, 5,10  
 Pulkovo, 4,4  
 Caustic test, 3,22; 4,22; 5,20  
 Celestial navigation, see Navigation  
 Celestial photographs, see Photographs  
 Cepheid variables—distance measured by, 8,9  
 period-luminosity, 9,19  
 Cepheus, 12,22  
 Chinese, early, and astrology, 3,10  
 Christmas—date of, 2,9  
 Star, 2,10; Venus as, 2,11  
 Christmas Story, *William H. Barton, Jr.*, 2,9  
 Clark, Alvan G., 11,4  
 Clarke, Eric, 5,15  
 Cleveland Conclave, *S. W. McCuskey*, 4,14  
 Clouds, *Charles F. Brooks*, 6,14  
 Coblenz, W. W., 5,17  
 Cohen, I. Bernard, The Astronomical Work of Galileo Galilei, 3,3  
 Columbus and navigation, 12,6  
 Coma Berenices, 9,22  
 Comet awards, 7,20  
 Comets—12,17  
 Grigg-Skjellerup, 8,11  
 Halley's, 5,8  
 in 1925, 1,6  
 Jurlof-Achmarof-Hassel (ill.), 1,6  
 Whipple 1933f, 9,12; 1942a, 5,10; 5,25  
 Constellations—Autumn Skies, *William H. Barton, Jr.*, 11,12  
 See individual constellations  
 Copeland, Leland S., From Poem to Science, 9,22  
 Lion-Guarded Gate, The, 7,26  
 Man with the Snake, The, 10,22  
 Martyr of 1600, The (Bruno), 6,8  
 Mysterious Engonasin, 11,22  
 Nubia's Shining Trio and the Fighting Flier from Greece, 12,22  
 Orion, Glory of Winter, 3,26  
 Pastures of the Sky, 5,26  
 Seven in Silver Mist, 6,26  
 Seven Stars, The, 4,26  
 Starry Heavens in . . . , all issues but 1 and 2  
 Where Galaxies Swarm, 8,26  
 Copernican system, 8,3  
 Copernicus Society, 11,6

Cordoba Observatory, The, *Enrique Gaviola*, 5,3; (ill.), 5,1  
 Cosmic Ray Observations on the U.S. Antarctic Expedition, *Serge A. Korff*, 5,14  
 Crab Nebula, The, *John C. Duncan*, 12,3; (ill.), 12,24  
 Curtis, H.D., 4,13; 4,16  
 Cygnus, nova in, 12,17

## D

Daniel, Zaccheus, 5,17  
 Dietrich, William A., aurora observations (Sept. 18-19, 1941), 1,14  
 Do You Know? quiz column, *L. J. Lafleur*, 1,19; 2,19; 3,8; 4,23; 5,17; 6,5; 7,6; 8,17; 9,8; 10,17; 11,17; 12,5  
 Dominion Astrophysical Observatory, 1,12  
 Doppler shift, 7,5  
 Double stars—Algol, see Algol  
 Double Star 61 Cygni, The, *K. Aa. Strand*, 3,6; 61 Cygni, 2,6  
 eclipsing, 4,7; 5,16; 5,17  
 list of, 8,23; 10,23; 12,23  
 Mu Draconis system, 10,9  
 observing, 5,18  
 Sirius and Its Companion, *Robert G. Atken*, 11,3  
 spectroscopic binary HD 34762, 5,17  
 Story of Beta Lyrae, The, *Gerard P. Kuiper*, 5,4  
 sub-dwarf binary system, 10,9  
 Visual Double-Star Observations, *Jesse A. Fitzpatrick*, 8,24  
 Duncan, John C., The Crab Nebula, 12,3  
 Dunton, Adeline, A Stargazer's Workshop, 2,18

## E

Earth, size of, 4,5  
 Earthquake records, 6,13  
 Easter, origin of, 5,12  
 Eckert, W.J., 9,4  
 Eclipses, see Sun and Moon  
 Einstein, Albert, 12,9; 12,19  
 Elvey, C.T., 6,13  
 Engonasin, 11,22  
 Equation of time, 11,20  
 Equinox and the Southern Cross, The, *Jesse A. Fitzpatrick*, 11,20  
 Era of Nabonassar, The, *Edgar W. Woolard*, 6,9  
 Eros, solar parallax from, 1,11  
 Evans, R.D., 6,13

## F

Finland, letter from Jaakko Tuominen, 1,13  
 Fisher, Clyde, 1,3  
 Fitz, Henry, 5,21  
 Henry Fitz—Early American Telescope Maker, *Ralph S. Bates*, 1,18  
 Fitzpatrick, Jesse A., Eclipse of the Moon, The—August 25-26, 1942, 10,20  
 Equinox and the Southern Cross, The, 11,20  
 Hyades Occultations and the Moon's Motion, The, 12,20  
 Moon in the Hyades, The, 1,25  
 Moon's Libration in Longitude, The, 3,24  
 Observer's Page, all issues  
 Occultation Predictions, 7,24  
 Occultation Times, 6,24  
 Path of Uranus, The, 1,24  
 Saros Facts and the Lunar Eclipse, 10,10  
 Visual Double-Star Observations, 8,24; 9,20  
 Flammarion, Camille, 7,20

*Forgotten Planets, The, Harry Stubbs*, 2,7  
Fowler, R.G., 5,17  
*Frank, Philipp, Relativity . . . and Its Astronomical Implications, Part I*, 12,9  
Friends of Mine (poem), *Richard Herbert Mann*, 1,9  
Fuller, *Urania Dayton*, book review, 7,21

## G

Galaxies—M33, 7,20  
M83 and N.G.C. 3621 (ill.), 9,1  
observing, 8,26  
Progress in Extragalactic Research, *Katherine Gordon*, 2,14  
research, 4,14  
Sombrero nebula (ill.), 8,28  
Stephan's quintet (ill.), 2,28  
Galileo—and Saturn's satellites, 3,17  
Astronomical Work of Galileo Galilei, *I. Bernard Cohen*, 3,3  
(ill.), 3,1  
Gamble, Carl H., 3,18  
Gamma Cassiopeiae, The Story of, *Ralph B. Baldwin*, 9,5  
Gaposchkin, Cecilia Payne-, 2,12  
Gaposchkin, Cecilia Payne-, Astronomy at the Inter-American Scientific Conference, 6,11  
Gaposchkin, S., 6,11  
Garland, Fred, Pittsburgh Amateur, 4,18  
Gaviola or "caustic" test, 3,22; 4,22; 5,20  
Gaviola, Enrique, The Cordoba Observatory, 5,3  
Geomagnetism, The Variations of, *H. D. Harradon*, 8,12  
Gilbert and Sullivan, Frederic's birthday, 3,19  
Ginter, C.M., letter from, 7,10  
Gleanings for A.T.M.s, edited by *Earle B. Brown*, all issues; see under authors for titles  
Globular clusters—47 Tucanae (ill.), 9,1  
sizes and distances, 8,10  
velocities, 6,12  
Goedcke, Victor, 12,17  
Goedcke, Victor, Astronomers Meet at New Haven, 9,3  
Goodricke, John, 4,8  
Gordon, Katherine, Progress in Extragalactic Research, 2,14  
Graef, Carlos, 6,13  
Graphic Portrayal of Celestial Events, *Carroll F. Merriam*, 3,16  
Graphic Time Table of the Heavens—1942, 3,14  
Gravity, law of, 12,11  
Greenstein, Jesse L., High-Dispersion Spectra, 7,14  
Greenwich meridian, 12,7  
Griffith Observatory, 8,8  
Guam, eclipse observations in, 2,5  
Guzman-Rivas, Pablo, Late Photos from Manila, 3,12

## H

Hall, R.G., 5,16  
Halley—and Sirius, 11,4  
comet, see Comets  
Second Astronomer Royal—Edmond Halley, *Ralph S. Bates*, 5,7  
Harradon, H.D., The Variations of Geomagnetism, 8,12  
Harris, Herbert M., 2,18  
*Harris, Sylvan, How Elliptical Is My Orbit?* 11,17  
Shadow on Moon in March, 4,11  
Harrison, John, 12,7  
Harvard summer session, 6,5

Harvard College Observatory—announcement cards, 6,2  
Bloemfontein plates, 4,16  
Climax station, 2,16  
Hayden Planetarium—Planetarium Notes, all issues  
*Hellweg, Capt. J. F.*, book review, 4,20  
Hercules, 11,22  
Herschel telescope, 12,15  
Hertzprung, E., 7,3  
Hi and Ho, Chinese astronomers, 9,17  
Hiltner, W.A., 5,17  
Hoffleit, Dorrit, 5,16; 10,9  
*Hoffleit, Dorrit, Conference on Spectroscopy*, 11,16  
Diagnosis of Stars from Their Spectra, The, 7,3  
Harlow Shapley Honored, 2,12  
News Notes, all issues but 1  
Holden, Edward S., 11,3  
Horoscope of W. Carl Rufus, The, 3,11  
How to Meet the Fifth Column in Astronomy, *W. Carl Rufus*, 3,8  
Huffer, C.M., 4,7  
Hyades occultations, 12,20  
Hynek, J.A., 4,7

## I

Inertia, law of, 12,10  
In Focus—moon's features, 5,2  
planetary nebulae, 10,2  
Pleiades, 6,2  
region of Theta Ophiuchi, 11,2  
Scutum star cloud, 9,2  
solar granules, 7,17  
Instruments—interferometer (ill.), 8,10; 8,23  
Make Your Own Spectroscope, *Earle B. Brown*, 11,18  
microdensitometer, 2,14; 10,12  
rotating sectors, 10,9  
spot sensitometer, 10,12  
star-counting device, 4,7  
Interstellar—dust, 4,7  
iron, 4,16  
medium, 6,11

## J

Jonckheere, R., 6,17  
Jones, H. Spencer, 1,11; 9,10  
Joy, Alfred H., 6,17  
Jupiter—Eleven Moons of Jupiter, The, *Percy W. Witherell*, 6,18  
Jupiter, the Giant Planet, *Percy W. Witherell*, 4,17  
satellites of (diagrams), 1,25; 2,24; 3,25; 4,25; 5,24; 6,24; 11,20; 12,20  
satellites observed by Galileo, 3,4

## K

Keenan, Philip C., 7,17  
Kensington Observatory, 2,13  
Kepler, laws, 3,7; 8,4  
manuscripts (ill.), 4,4  
Kellner, G.A.H., 6,21  
Kiess, M., 5,16  
*Kingsbury, John A., Leonids at Lavorika*, 1,3  
Knight, N.F.H., 12,17  
Kopal, Zdenek, 5,17  
*Kopal, Zdenek, Predictions of Algol Minima*, 4,2  
Story of Algol, The, 4,8  
*Korff, Serge A., Cosmic Ray Observations on the U.S. Antarctic Expedition*, 5,14  
Krogdahl, W., 5,16  
Kuiper, G. P., 6,17  
*Kuiper, Gerard P., The Story of Beta Lyrae*, 5,4

## L

Ladd Observatory, 2,13  
*Lafleur, L.J., Do You Know? quiz column*, all issues  
Latitude-Time Device, 2,11  
Leavitt, Henrietta, 9,19  
Leet, L. Don, 6,13  
Leo, 7,26  
Leonids at Lavorika, *John A. Kingsbury*, 1,3  
Levi-Civita, Tullio, 7,20  
Light—Waves from Space, *William H. Barton, Jr.*, 4,5  
*Lockwood, Marian, Biography, The SKY*, 1,7  
Lunar eclipses, see Moon  
Lyot, Bernard, 1,13; 7,17  
Lyra, 11,12

## M

Magnetism—Halley's work on, 5,7  
Variations of Geomagnetism, The, *H. D. Harradon*, 8,12  
MacRae, Donald A., 10,9  
Manila Observatory, 3,12  
*Mann, Richard Herbert, Friends of Mine (poem)*, 1,9  
Mars—An Amateur Looks at Mars, *J. Russell Smith*, 6,6  
Is Mars Inhabited? 1,8  
Mysterious Mars, *William H. Barton, Jr.*, 1,8  
Marshall, Roy K., Astronomy and War, 3,2  
book reviews, 1,22  
Martyr of 1600, The (Bruno), *Leland S. Copeland*, 6,8  
Mayall, Margaret W., 4,7  
Mayall, N.U., 6,12  
*Mayall, R. Newton, book review*, 3,20; 6,23  
McCuskey, S.W., 4,7  
McCuskey, S.W., Cleveland Conclave, 4,14  
McLaughlin, Dean B., 9,12  
McMath, R.R., 6,13  
Menzel, Donald H., 6,13  
*Menzel, Donald H., Biography, The Telescope*, 1,7  
book review, 4,20; 5,22  
News from Abroad, 1,13  
Sojourn in Mexico, 6,3  
Mercury—ellipticity of orbit, 11,17  
1940 transit, 10,16  
*Merriam, Carroll F., Graphic Portrayal of Celestial Events*, 3,16  
Meteorites—bomb-equivalent of, 5,10  
excavating, 6,17; 8,6  
measurements of age of solar system, 6,13; 7,20  
Meteorites, *Percy W. Witherell*, 11,11  
origin of, 8,7  
Trends in Meteoritics, *H.H. Nininger*, 8,6  
Meteoritics, Trends In, *H.H. Nininger*, 8,6  
Meteorology—Clouds, *Charles F. Brooks*, 6,14  
Halley's work on, 5,7  
rainbows, 7,10  
Weather Signs in the Sky, *William H. Barton, Jr.*, 7,7  
Meteors—Geminids due, 2,25  
Leonids, 1,3  
Meteors—and the Perseids, *Percy W. Witherell*, 10,15  
photography with a Schmidt, 4,16  
shock waves and, 11,6  
whistling, 8,11  
Mexico—Astronomy at the Inter-American Scientific Conference, *Cecilia Payne-Gaposchkin*, 6,11  
conference, 4,6  
Mexico's New National Observatory, *Bart J. Bok*, 2,3; (ill.), 2,1

**Mexico—continued**

New Observatory Dedicated, 5,13  
 Sojourn in Mexico, Donald H. Menzel, 6,3  
 stamps (ill.), 7,1; 7,2  
 Microdensitometer, see Instruments  
 Milky Way—Milky Way, The, Percy W. Witherell, 9,15  
 pole, 7,10  
 structure, 6,12  
 Milne, E.A., 3,13  
 Mira maximum, 7,25  
 Months—kinds of, 10,3  
 Moon—5,2; (ill.), 1,28; (ill.), 5,28  
 and weather, 7,9  
 chart, 2,17  
 eclipses, 10,4; March 2-3, 1942, 4,11; 5,19; 6,2; 7,10; August 25-26, 1942, 12,8  
 Eclipse of the Moon, The (August 25-26, 1942), Jesse A. Fitzpatrick, 10,20  
 harvest, 11,20  
 Hyades Occultations and the Moon's Motion, The, Jesse A. Fitzpatrick, 12,20  
 illusion of size, 11,6  
 in the Hyades, 1,25  
 librations of, 1,17; in longitude, 3,24  
 Moon, The, George V. Plachy, 1,17; 2,17  
 phases, 1,17; phases of (current), all issues  
 quiz, 10,17  
 Saros Facts, Jesse A. Fitzpatrick, 10,10  
 Theophilus, 8,24  
 tides, 12,14  
 Moore, Charlotte E., 9,13  
 Morgan, W.W., 6,13  
 Mt. Palomar Observatory (ill.), 11,1; 11,2  
 Mt. Wilson annual report, 11,6

**N**

Nabonassar, era of, 6,9  
 Nassau, J.J., 4,7  
 Navigation—and Army, 4,14  
 Autumn Skies, William H. Barton, Jr., 11,12  
 courses—Hayden Planetarium, 6,23  
 discussion at A.A.S. meeting, 9,3  
 Elements of Celestial Navigation, Fletcher G. Watson, 11,7  
 piloting, 11,7  
 Sailing the Seven Seas, William H. Barton, Jr., 12,6  
 Some Comments, Newton L. Pierce, 10,7  
 teaching of, 4,2  
 Teaching of Navigation, The, John Q. Stewart, 10,6  
 Nebulae—Crab Nebula, The, John C. Duncan, 12,3  
 extragalactic, see Galaxies  
 M8 and M20 (ill.), 8,1  
 Neptune—2,7; 8,5  
 motion of, 4,25  
 satellites, 2,7  
 spectrum (ill.), 2,7  
 News from Abroad, 1,13  
 News Notes, Dorris Hoffleit, all issues but 1  
 Newton, Sir Isaac, 5,8; 7,23; 12,9  
 New Zealand—history of astronomy in . . . compiled, 7,20  
 letter from J. L. Thomsen, 1,13  
 Night sky, problems of, 6,13  
 Night vision, 10,16  
 Nininger, H.H., 9,19  
 Nininger, H.H., Trends in Meteoritics, 8,6  
 Northern lights, see Aurora  
 Nova (e)—and Galileo, 3,3  
 Crab Nebula, The, John C. Duncan, 12,3  
 Cygni 1942, 12,17  
 Herculis, 11,6  
 spectrum interpreted, 9,12  
 Story of Gamma Cassiopeiae, The, Ralph B. Baldwin, 9,5

Occultations—of Mars, photos from Manila Observatory, 3,12  
 Occultation Predictions, Jesse A. Fitzpatrick, 7,24  
 Occultation Times, Jesse A. Fitzpatrick, 6,24  
 table of, all issues  
 Olivier, C.P., 1,3  
 Omega Centauri, 8,24  
 Oort, J.H., 8,11  
 Ophiuchus, 10,22; 11,2; (ill.), 11,24  
 Orion, 3,26

**P**

Parallax—solar, see Sun  
 stellar, see Stellar Parallax  
 Pearce, J.A., 5,16  
 Perseids, 10,15; 10,20  
 Perseus, 12,22  
 Petrie, R.M., 10,9  
 Petrie, William, J.S. Plaskett, 1,12  
 Philippine Islands, letter from Pablo Guzman-Rivas, 3,12  
 Phillips, T.E.R., 7,20; 10,16  
 Photographs on back covers  
 Crab nebula in red light, 12,24  
 moon, 1,28; 5,28  
 Pleiades, 6,28  
 region of Theta Ophiuchi, 11,24  
 Ring nebula, 10,24  
 Saturn, 3,28  
 Scutum star cloud, 9,24  
 solar granules, 7,28  
 Sombrero nebula, 8,28  
 Stephan's quintet, 2,28  
 Warner and Swasey 24-inch Schmidt, 4,28  
 Photography—determining time of photograph from shadows, 11,10  
 of double stars, 3,6  
 of meteors with Schmidt, 4,16  
 progress in emulsions, 10,9  
 Pi, 10,5; 12,15  
 Pierce, Newton L., Some Comments (on teaching of navigation), 10,7  
 Piloting, see Navigation  
 Plachy, George V., book review, 9,18  
 The Moon, 1,17; 2,17  
 Planetarium, The (poem), Dante Vezzoli, 3,16  
 Planetarium Notes, all issues  
 Planets—current positions, Observer's Page, all issues  
 diameters, 9,17  
 ellipticity of orbits, 11,17  
 Forgotten Planets, The, Harry Stubbs, 2,7  
 Graphic Time Table of the Heavens—1942, 3,14  
 Planets and Their Relation to History, The, William H. Barton, Jr., 8,3  
 tenth planet? 9,19  
 Planetary nebulae, (ill.), 10,1; 10,2  
 "Ages of Observation," Lawrence H. Aller, 10,11  
 Ring nebula (ill.), 10,24  
 Plaskett, J.S., William Petrie, 1,12  
 Pleiades, 6,2; 6,11; 6,26; (ill.), 6,28  
 Pleione, spectrum of, 5,16  
 Pluto, discovery of, 8,5  
 Polynesians and navigation, 12,6  
 Pulkovo Observatory—A.A.S. declaration, 4,16  
 destroyed, 3,13; 3,19  
 Pulkovo Observatory, The, Otto Struve, 4,3  
 Ptolemaic system, 8,3  
 Ptolemy and astrology, 3,10

**Q**

Quiz column, Do You Know? L.J. Lafleur, all issues

**R**

Rainbows, see Meteorology  
 Raisz, Erwin, The Analemma, 7,11  
 Rasmussen, Otto, 12,12  
 Relativity—12,2  
 mathematical concept of time, 6,13  
 perfected, 4,16  
 Relativity . . . and Its Astronomical Implications, Part I, Philipp Frank, 12,9  
 Rensselaer Polytechnic Observatory, (ill.), 12,1; 12,12  
 Richardson, R.S., 9,19  
 Ring nebula, 10,11; (ill.), 10,24  
 R.K.M., see Astronomical Anecdotes for titles, all issues  
 Roberts, Walter O., An Observation of the Solar Corona, 2,16  
 Rufus, W. Carl, How to Meet the Fifth Column in Astronomy, 3,9  
 Russell diagram, 7,4  
 Russell, Henry Norris, 5,10; 6,11  
 Russia, letter from, 12,17  
 Rutherford, Lewis M., 3,7  
 Ryan, William T., Aurora observations, 1,15

**S**

Sacred Calabash, 12,6  
 Saros—10,3  
 Saros Facts, Jesse A. Fitzpatrick, 10,10  
 Satellites, 1,17  
 Saturn—Saturn and Its Rings, Percy W. Witherell, 3,17  
 (ill.), 3,28  
 satellites of, 3,17  
 Scanlon, Leo, 4,18  
 Scheuer, Sidney, Some Astronomical Methods, 8,9  
 Schmidt cameras, see Telescopes  
 Scorpius, 11,13  
 Scutum star cloud, 9,2; (ill.), 9,24  
 "Scurrilous Poster," A, 2,13  
 Second Astronomer Royal—Edmond Halley, Ralph S. Bates, 5,7  
 Sellards, E.H., 6,17  
 Shapley, Harlow, 2,12; 3,13; 4,14; 6,12; 9,19  
 Shaw, R. William, book review, 10,19  
 Sirius—5,16; 7,4  
 Sirius and Its Companion, Robert G. Aitken, 11,3  
 Sitterly, B.W., 4,7  
 61 Cygni—orbit, 2,6  
 Double Star 61 Cygni, The, K.Aa. Strand, 3,6  
 SKY, The, Biography of, Marian Lockwood, 1,7  
 Smiley, Charles H., book review, 6,22  
 Smith, J. Russell, An Amateur Looks at Mars, 6,6  
 Solar eclipses, see Sun  
 Solar parallax, see Sun  
 Solar system—measurements of age, 6,13  
 origin, 10,16  
 Solstice, summer, 8,18  
 Some Astronomical Methods, Sidney Scheuer, 8,9  
 South, Sir James, 2,13  
 South African observatories—Bloemfontein plates, 4,16  
 Cape of Good Hope report, 4,17  
 Southern Cross, 11,20  
 Spectroscopic, see Instruments and Spectroscopy

Spectroscopy—and planetary nebulae, 10,11  
 Balmer lines, 4,6  
 Beta Lyrae, 5,4  
 Cannon memorial volume, 4,7  
 classification of spectra, 6,13; 7,3  
 cyanogen intensities, 10,9  
 Diagnosis of Stars from Their Spectra,  
     The, *Dorrit Hoffleit*, 7,3  
 High-Dispersion Spectra, *Jesse L. Greenstein*, 7,14  
 June conference on, 7,20; 11,16  
 large objective gratings, 6,13  
 parallax, 7,4  
 revised multiplet table, 9,13  
 Sirius and Alhena, 5,16  
 spurious bands, 5,17  
     standard lamp energy distribution, 5,17  
 Spitz, Armand N., book review, 7,21  
 Spitzer, Lyman, 4,7  
 Spring—Spring, William H. Barton, Jr., 5,11  
     history of, 5,11  
 Sproul Observatory, 8,19  
 SS Cygni—light curve, 1,10; 9,13  
 Stamps, astronomical (ill.), 7,1; 7,2  
 Star shells, 5,16; 7,16  
     Beta Lyrae, 5,4  
     Pleione, 5,16  
 Star of Bethlehem, 2,10  
 Starry Heavens in . . . The, *Leland S. Copeland*, all issues but 1 and 2  
 Stars—absolute magnitudes, 7,4; 10,9  
     binary, see Double Stars  
     blue and red magnitudes, 4,7; 6,13  
     by day, 7,23; 10,5  
 Diagnosis of Stars from Their Spectra,  
     The, *Dorrit Hoffleit*, 7,3  
 direction finding from, 7,13  
 distribution, 10,9  
 distances from spectra, 5,16  
 double, see Double Stars  
 dynamical parallax, 8,23  
 evolution, 6,11  
 giants and dwarfs, 7,3  
 maps, all issues  
 masses, 8,23  
 navigational, 11,14  
 nearest, 6,17  
 parallax, see Stellar Parallax  
 radial velocities, 7,5  
 refueling the, 3,13  
 remarkable red star, 6,17  
 Saturn-like star, 6,17  
 star-counting device, 4,7  
 temperatures, 8,23  
 variable, see Variable Stars  
 Stebbins, Joel, 6,11  
 Stellar parallax—4,4  
     at Allegheny, 5,17  
     determination, 8,9  
     problems, future, 9,13  
 Stenbeck, Harold, Amateurs of Science, 10,8  
 Stetson, Harlan T., book review, 9,18  
 Stewart, John Q., Navigation, 10,2  
     Teaching of Navigation, The, 10,6  
 Stillwell, W. H., 5,17  
 Stokley, James, book review, 4,21  
 Storer, N. Wyman, 2,11  
 Strand, K.Aa., 10,9  
 Strand, K.Aa., The Double Star 61 Cygni,  
     3,6  
 Strange, Raymond J., Lunar Eclipse Observed, 7,10  
 Struve, F.G.W., 4,3; (ill.), 4,1  
 Struve, Otto, 5,16; 6,11  
 Struve, Otto, The Pulkovo Observatory,  
     4,3  
 Stubbs, Harry, The Forgotten Planets, 2,7  
 Stuempfie, R.—letter from, 5,18  
     sketches of Mars, 6,6  
 "Summer" Solstice, Percy W. Witherell, 8,18  
 Sumner lines of position, 11,7

Sun—ancient worship of, 9,9  
 corona, 1,13; 2,16; 10,16  
 densities, 2,6  
 distance, 1,11  
 eclipses, 10,4; September 21, 1942, 2,5;  
     July 26, 3928 B.C., 5,10  
 Facts About Eclipses, *William H. Barton, Jr.*, 10,3  
 Facts About the Sun, *William H. Barton, Jr.*, 9,9  
 granules, 7,17; (ill.), 7,28  
 motions, 9,11  
 parallax, 1,11; 3,19; Halley's work on,  
     5,9; 9,9  
 prominences, 6,13  
 rotation, 9,10  
 spectrum, 9,4  
 "Sun-Gazers on Tutjan Hill," *Foster D. Brunton*, 2,5  
 Sunspots, *Percy W. Witherell*, 7,19  
 sunspots and magnetic storms, 8,14  
 variability, 6,13; and atmospheric tempera-ture, 7,7  
 Sundine, Jack, Midwestern Amateur's Observatory, 3,18  
 Supernova (e)—Kepler's star, 5,10  
     of 1054, 8,11; 12,4  
 Swann, W.F., 10,9  
 Swift, Dean, 3,9  
 Swope, Henrietta, 6,11

## T

Tacubaya Observatory, 2,4  
 Taurus, 5,26  
 Telescope, The, Biography of, *Donald H. Menzel*, 1,7  
 Telescope(s)—early, 5,21  
     Galileo's use of, 3,4  
     Rensselaer Polytechnic Institute, (ill.), 12,1; 12,12  
 Refractor Versus Reflector, *Earle B. Brown*, 9,16  
 Reversed Schmidt, A, 6,21  
 60-inch Cordoba reflector, 5,3  
 Warner and Swasey Schmidt, 4,15; (ill.), 4,28  
 Weertman's turret-type, 11,15  
 Telescope making—A.T.M. and the War,  
     The, *Earle B. Brown*, 6,20  
 collimating, 1,19  
 Designing an Achromatic Objective, *Earle B. Brown*, 10,18; 12,18  
 Further Note on Diagonals, *Earle B. Brown*, 7,22  
 Gaviola or "Caustic" Test, The, *Earle B. Brown*, 3,22; 4,22; 5,20  
 Henry Fitz—Early American Telescope Maker, *Ralph S. Bates*, 1,18  
 Objective-Grating Plates, *Earle B. Brown*, 8,22  
 Paradoxical Parabolas, *Earle B. Brown*, 2,22  
 Report on a Schupmann, *Earle B. Brown*, 6,20  
 Twenty-Inch Operations, *Carl F. Alsing*, 1,19  
 Thomas, Richard N., 9,12  
 Thomsen, J.L., letter from, 1,13  
 Tides and Their Variations, *Percy W. Witherell*, 12,14  
 Tonanzintla Observatory, see Mexico  
 Tuominen, Jaakko, letter from, 1,13

## U

Uranus, 2,7; 8,5  
 The Path of Uranus, *Jesse A. Fitzpatrick*, 1,24

## Uranus—continued

satellites, 2,7  
 Ursa Major, 4,26

## V

Vaesaelae object, 6,17  
 Van de Kamp, Peter, 9,13  
 Variable stars—6,11  
     Algol, see Algol  
     observations from India, 11,6  
     SS Cygni (ill.), 1,10; 9,13  
     Story of Beta Lyrae, The, *Gerard P. Kuiper*, 5,4  
 Variations of Geomagnetism, The, *H.D. Harradon*, 8,12  
 Venus—phases (ill.), 8,5  
     phases discovered by Galileo, 3,5  
     transits, 9,9  
 Venus as the Christmas Star, *Jesse A. Fitzpatrick*, 2,11  
 Vernal equinox, 5,11  
     date of, 5,12  
 Vezzoli, Dante, The Planetarium (poem), 3,16  
 Virgo, 8,26  
 Vyssotsky, A.N., 6,13

## W

Wagman, Nicholas E., 1,26  
 Warner and Swasey Observatory, 4,14; (ill.), 4,28  
 Waterfield, R.L., 7,20  
 Watson, Fletcher G., book review, 1,22;  
     12,16  
     Elements of Celestial Navigation, 11,7  
 Waves from Space, *William H. Barton, Jr.*, 4,5  
 Weather, see Meteorology  
 Week, astrological background of, 3,9  
 Weertman, Roelof, 11,15  
 Wendt, Gerald, book review, 3,20  
 Whipple, Fred L., 6,11  
     Comet 1942a, 5,10; 5,25  
 Whipple, Fred L., How Distant Is the Sun?  
     1,11  
 Witherell, Percy W., Beginner's Page, all  
     issues but 1 and 2  
     book review, 11,19  
     Eclipse of the Moon, The, 5,19  
     Eleven Moons of Jupiter, The, 6,18  
     Jupiter, the Giant Planet, 4,17  
     Meteorites, 11,11  
     Meteors—and the Perseids, 10,15  
     Milky Way, The, 9,15  
     Saturn and Its Rings, 3,17  
     "Summer" Solstice, 8,18  
     Sunspots, 7,19  
     30th Annual Meeting—A.A.V.S.O., 1,10  
     Tides and Their Variations, 12,14  
 Witherspoon, Earl C., aurora observations  
     1,15  
 Wolff, Robert I., book review, 11,19  
 Wood, R.W., 4,15; 6,13  
 Wooldard, Edgar W., book review, 8,20  
     The Era of Nabonassar, 6,9  
 Wright, W.H., 10,16  
 Wyse, Arthur Bambridge, 9,19

## Y

Young, Mary Philips, aurora observations,  
     1,14

## Z

Zesewitsch, V., 12,17  
 Zodiacal light (ill.), 1,5